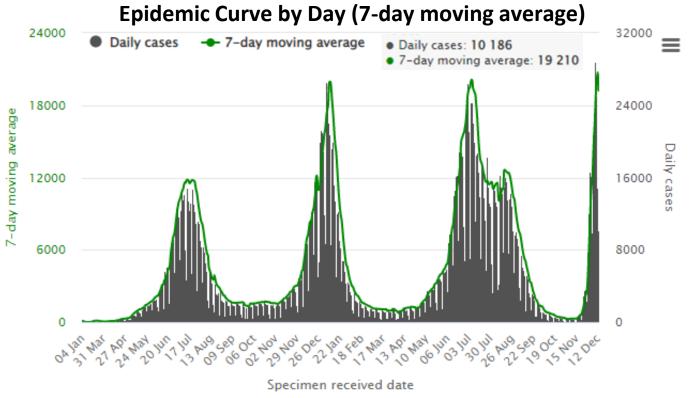
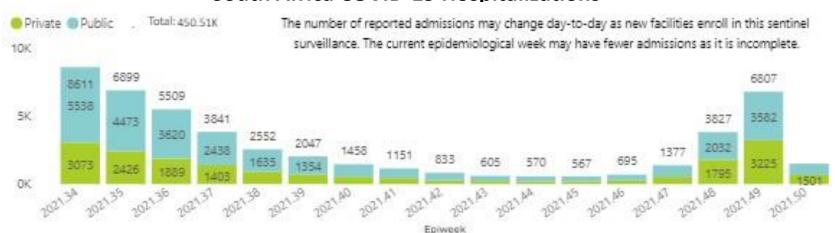
# Virginia COVID-19 Surveillance Data Update

**December 16, 2021** 

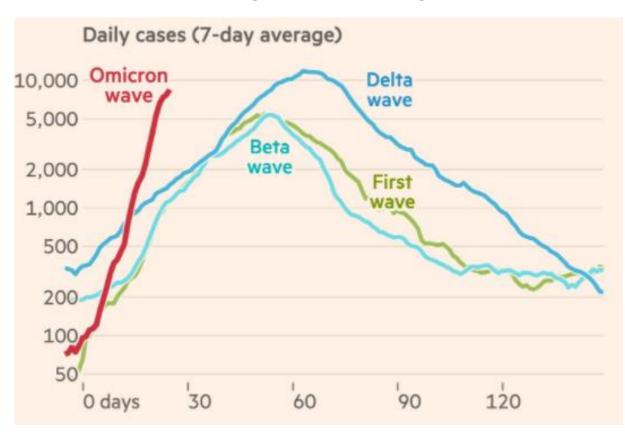




# **South Africa COVID-19 Hospitalizations**

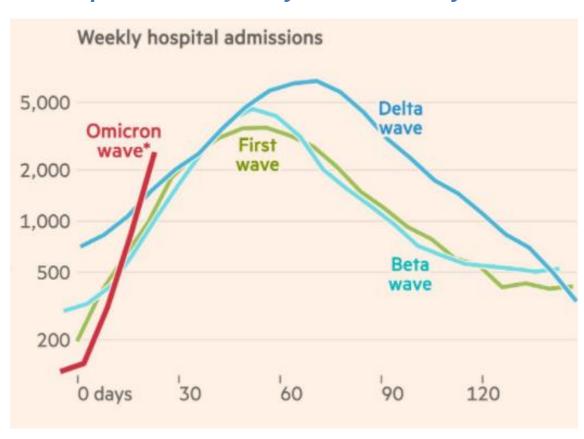


## **Cases by Number of Days**

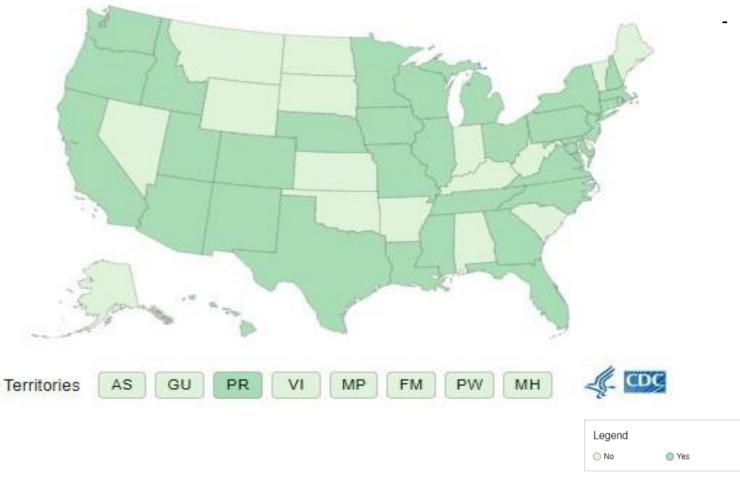


<sup>\*</sup>Start of wave defined as when 7-day average of cases rose for 7 successive days

## **Hospital Admissions by Number of Days**



# **US States with COVID-19 Cases Caused by Omicron Variant**



The Omicron variant has been detected in 35 states and jurisdictions (as of 12/15):

- MMWR report details 43 cases attributed to the Omicron Variant:
  - **Symptoms**: Most commonly reported cough, fatigue, congestion, and runny nose
  - Severity: One hospitalization and zero deaths
  - Patient Profile:
    - 79% of effected persons were previously vaccinated
      - 47% completed primary series
      - 33% received booster dose
    - 14% of persons were previously infected with COVID
    - 58% of persons were 18-39 years old

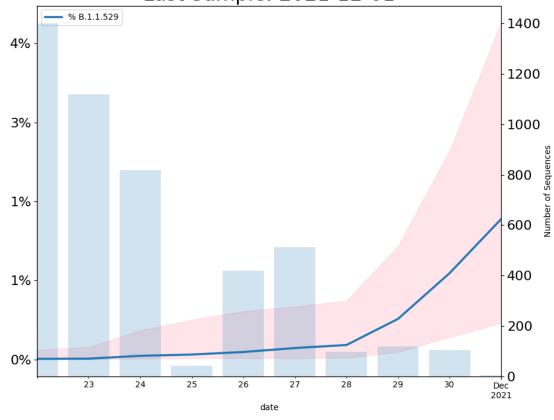
# U.S. Omicron Variant of Concern

# National Omicron Prevalence: 0.4 to 2.9% in a week ~ 3 Doublings



# **Omicron** O - **Lineage B.1.1.529**

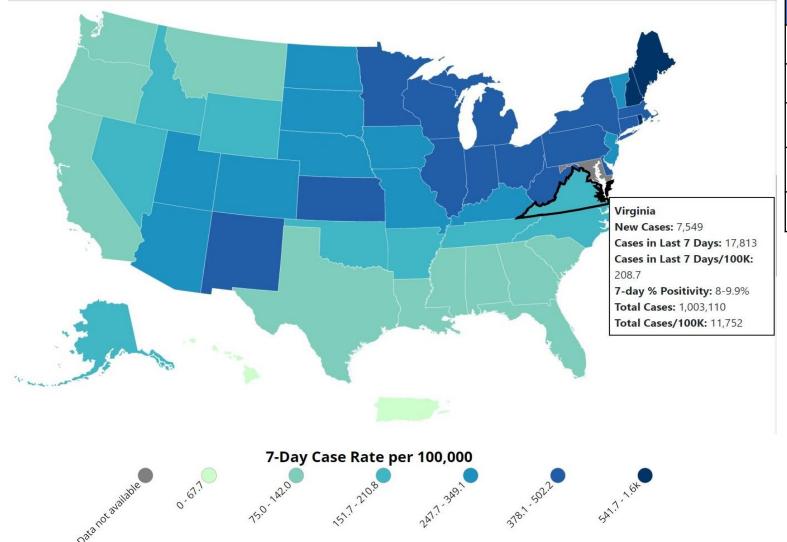
United States - 1.8% (B.1.1.529) Last Sample: 2021-12-01







US COVID-19: 7-Day Case Rate per 100,000, by State/Territory



	Cases in the Last 7 Days Per 100k Population	
Virginia	208.7 (+3.3%)	
U.S.	248.6 (-2.9%)	
New Hampshire	653.1 (-0.9%)	
Rhode Island	638 (+14.1%)	
Maine	541.7 (+35.1%)	

# **Our Neighbors**

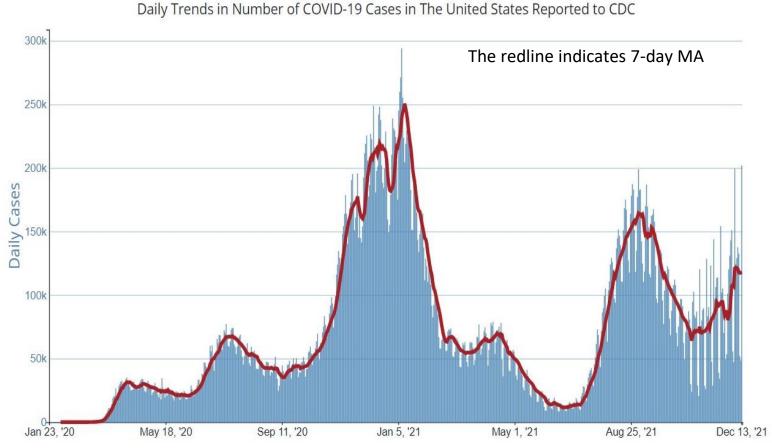
# **Rates Higher than Virginia**

West Virginia, **382.5** (-5.1%) Kentucky, **338.4** (-0.2%) North Carolina, **210.8** (+2.8%)

# **Rates Lower than Virginia:**

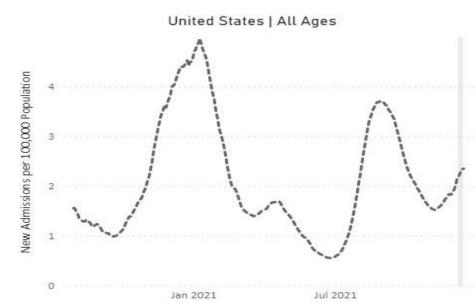
District of Columbia, 99.8 (-42%)

\*Maryland, N.A.



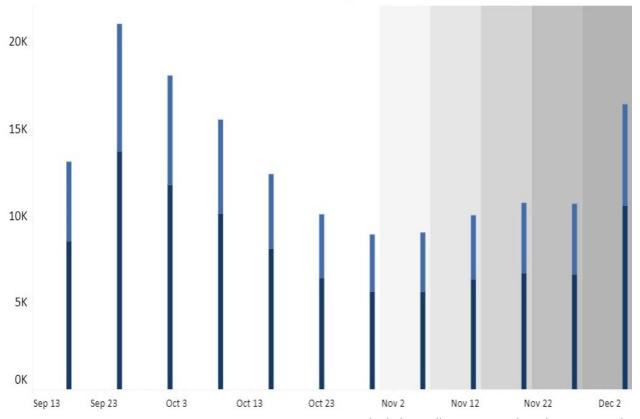
- Compared to last week, **cases** decreased to 117,890 (7-day MA) per day (-2.5%)
  - 53% lower than the January peak of 2021
  - 1237% higher than the June low of 2021
  - 28% lower than the September high of 2021
- Hospitalizations increased to 7,803 (7-day MA) per day (+7.7%)
- Deaths increased to 1,147 per day (+4.7%)





Source: CDC COVID Data Tracker

# **Cases by Date of Symptom Onset, Past 13 weeks**

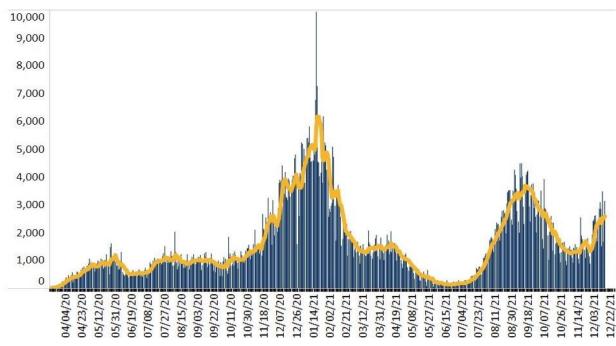


Gray shaded area illness may not have been reported yet

Compared to last week, **cases increased** to 2,585 (7-day MA) from 2,374 per day (+8.9%)

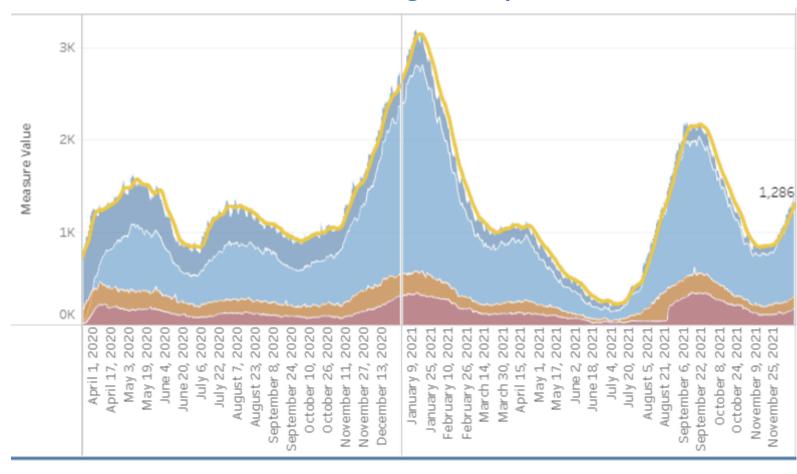
- 58% lower than the January peak of 2021
- 30% lower than the September high of 2021
- Hospitalizations increased to 1,286 per day (+19%)
- Deaths increased to 26.7 per day (+73%)

# **Cases by Date Reported, All Reporting Timeline**



# Virginia Hospitalization Trends

# **COVID-19 in Virginia Hospitals**



Confirmed COVID-19 Patients Currently on Ventilator Support\*

ICU Hospitalizations (Confirmed + Pending)

CONFIRMED Hospitalizations

Total Current COVID Hospitalizations (Confirmed + Pending)

7 Day Moving Average of COVID-19 Current Hospitalizations (Confirmed + Pending)

Hospitalizations have **increased 50%** since the Thanksgiving Holiday (November 25, 2021)

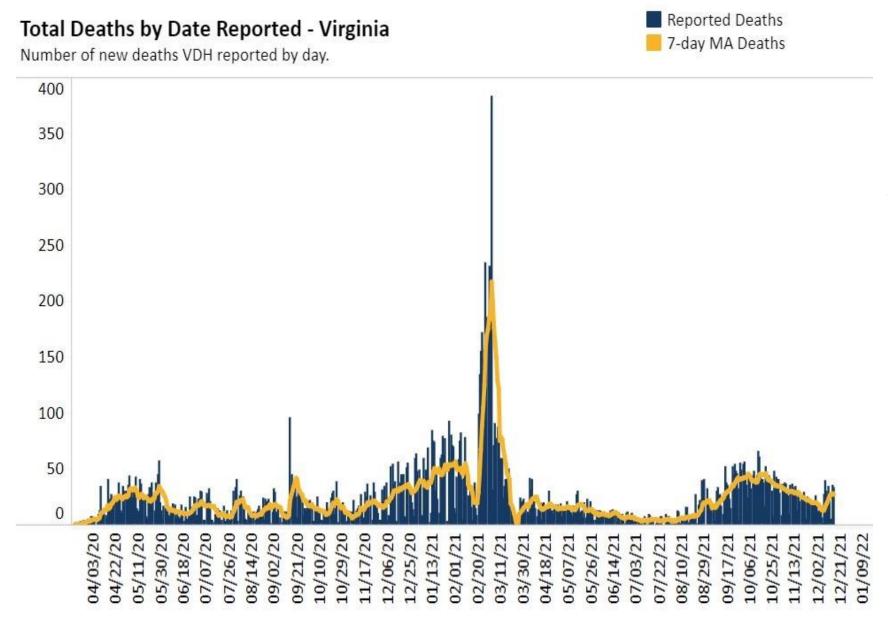
Compared to last week hospitalizations increased to 1,286 (7-day MA) from 1,085 (+19%)

 41% lower than the September high of 2021

Compared to last week. ICU hospitalizations have **increased to 324** from 250 (+30%)

174 patients are currently on ventilator support

- 51% lower than the September high of 2021
- 35% lower than the December 15<sup>th</sup>, 2020, Hospitalization Rate

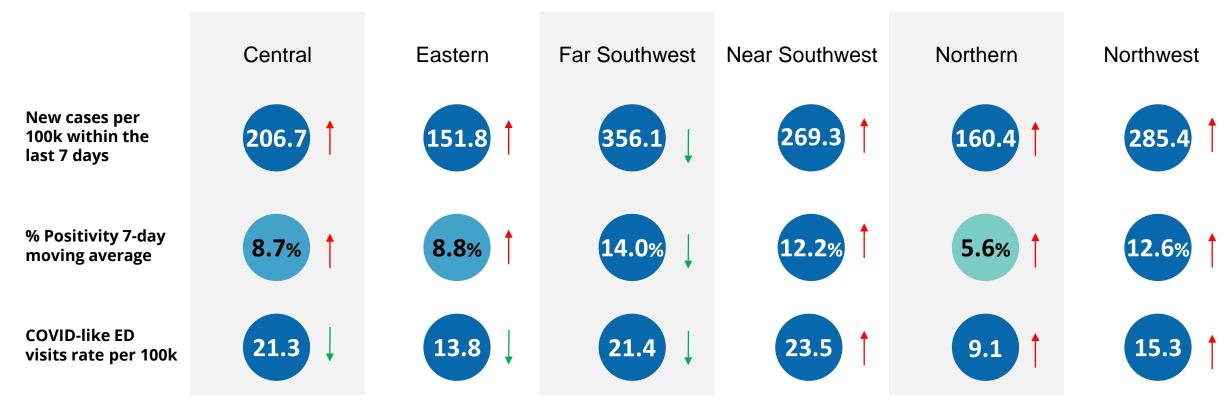


Virginia has seen a **50% increase** in COVID-19 deaths over the last 2 weeks

- 11% lower than the COVID-19 deaths reported last year at this time (December 15, 2020)
- 41% lower than the October2021 high

Source: Cases and Deaths by Date Reported - Coronavirus (virginia.gov)

Metrics date: 12/12/2021

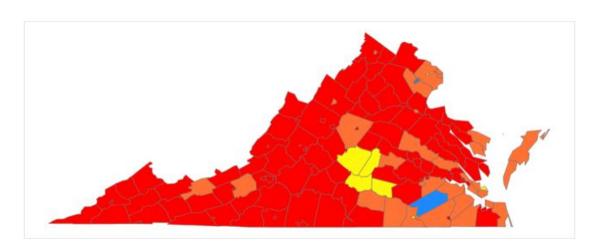


Burden	Level 0	Level 1	Level 2	Level 3	Level 4
New Cases	<10	10-49		50-100	>100
% Positivity	<3	3-5	5-8	8-10	>10
CLI ED Visits	<4		4-5.9		<u>&gt;</u> 6

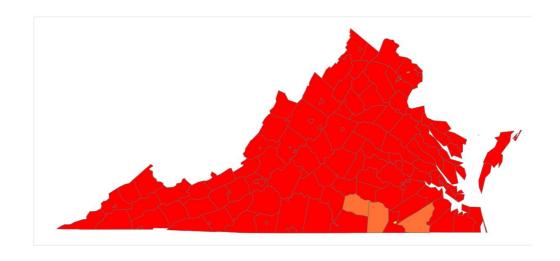
Symbol	Trend
<b>†</b>	Increasing
<b>\</b>	Decreasing
0	Fluctuating

Please note: the methods used this week have changed slightly; data is now compared from Sunday to Sunday instead of Wednesday to Wednesday

# Level of Community Transmission



December 2, 2021



December 16, 2021

Community Transmission Levels	Low Transmission	Moderate Transmission	Substantial Transmission	High Transmission
Total new cases per 100,000 persons in the past 7 days	0-9.99	10-49.99	50-99.99	≥100
Percentage of NAATs that are positive during the past 7 days	0-4.99%	5-7.99%	8-9.99%	≥10.0%

## **Key Trends**

- Outbreaks in LTCFs have accounted for 24% of total COVID-19 outbreaks in Virginia.
  - There were <u>56 LTCF COVID-19 outbreaks reported in the past 30 days</u>: 17 in Southwest, 16 in Northwest, 12 in Central, 10 in Eastern, and 1 in Northern (see figure top right).
- The number of reported resident and staff cases have increased in recent weeks (see figure bottom right).
  - For the reporting week ending December 5, 2021, <u>96 resident and 89 staff cases were</u> reported to NHSN.
- For reporting week ending December 5, 2021, data reported from 281 nursing homes showed <u>88% of residents were fully vaccinated</u>; data reported from 281 nursing homes showed <u>86% of staff were fully vaccinated</u> (see figure bottom left).
  - Of the 18,098 residents eligible to receive an additional dose or booster, 11,425 (63%) have received an additional dose or booster of COVID-19 vaccine.
  - Of the 22,144 healthcare personnel eligible to receive an additional dose or booster, 8,071 (36%) have received an additional dose or booster of COVID-19 vaccine.
  - Twenty-five (9%) nursing homes reported that **no** eligible residents have received an additional dose or booster of COVID-19 vaccine at the time of reporting.

**Nursing Home Staff** 

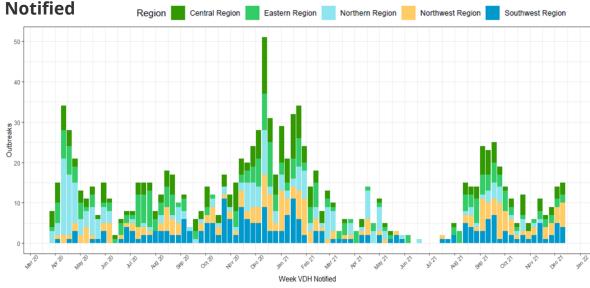
## **COVID-19 Booster Vaccination in Virginia Nursing Homes (n=286)**

**Nursing Home Residents** 

# 25,492 25,492 22,405 37,356 32,204 37,356 32,204 37,356 32,204 37,356 32,204 37,356 32,204 37,356 32,204 37,356 38,071 36,896 80,896

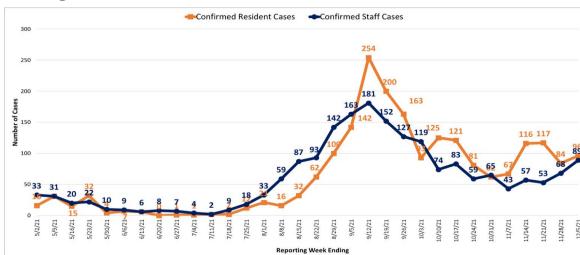
Data are from the National Healthcare Safety Network (NHSN) as of 12/14/2021 and are subject to change, including booster eligibility per updated vaccine guidance. In Virginia, 281 nursing homes reported resident vaccination data for reporting week ending 12/5/2021; 281 nursing homes reported staff vaccination data for reporting week ending 12/5/2021. For staff type definitions, refer to NHSN Table of Instructions.

# Number and Region of LTCF COVID-19 Outbreaks by Date VDH



Includes outbreaks reported from nursing homes, assisted living facilities, and multicare facilities to VDH with a confirmed or suspected etiologic agent of SARS-CoV-2; updated 12/13/2021.

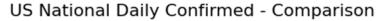
## **Nursing Home Resident and Staff COVID-19 Cases**



Data are from NHSN as of 12/14/2021 and are subject to change. For reporting information, please refer to the NHSN data collection forms: residents, staff.

# Outcome Projections – Closer Look

# **Confirmed cases**



Adaptive-FallWinter

Adaptive-HighBoost

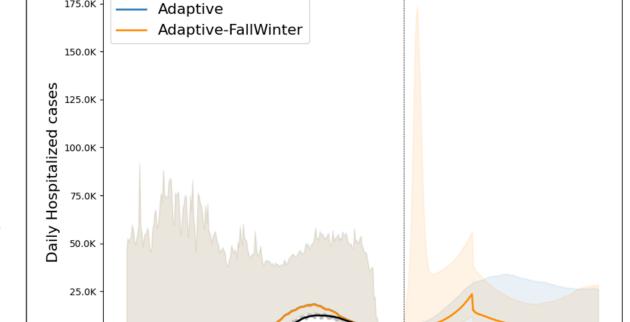
Adaptive-Omicron

Adaptive-SurgeControl

# Adaptive

# **Daily Hospitalized**





2021-03 2021-04 2021-06 2021-07 2021-08 2021-09 2021-12 2021-12 2021-01 2022-02 2022-03 2022-04 2022-06



BIOCOMPLEXITY INSTITUTE

175.0K

0.0

800.0K

600.0K

400.0K

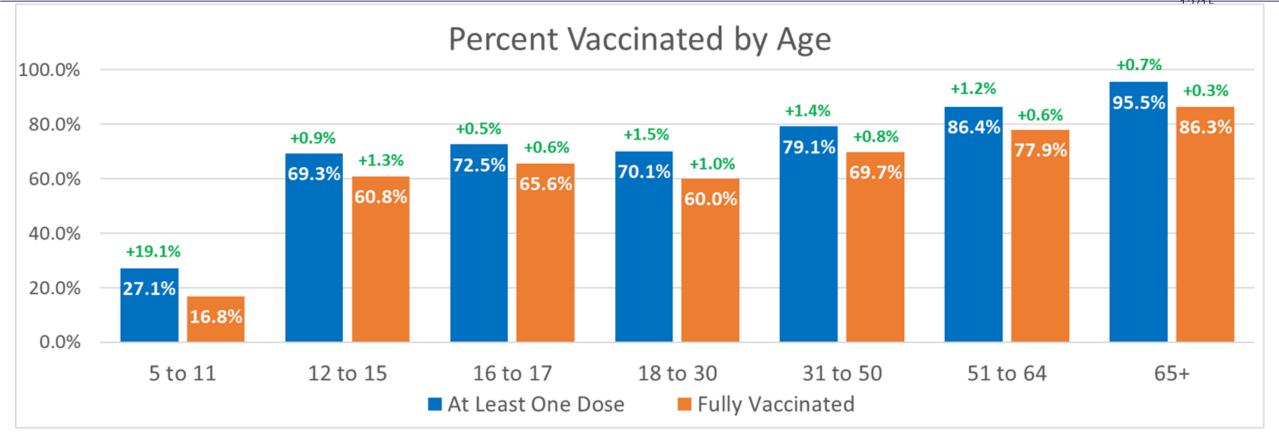
200.0K

0.0

cases

Confirmed

Daily

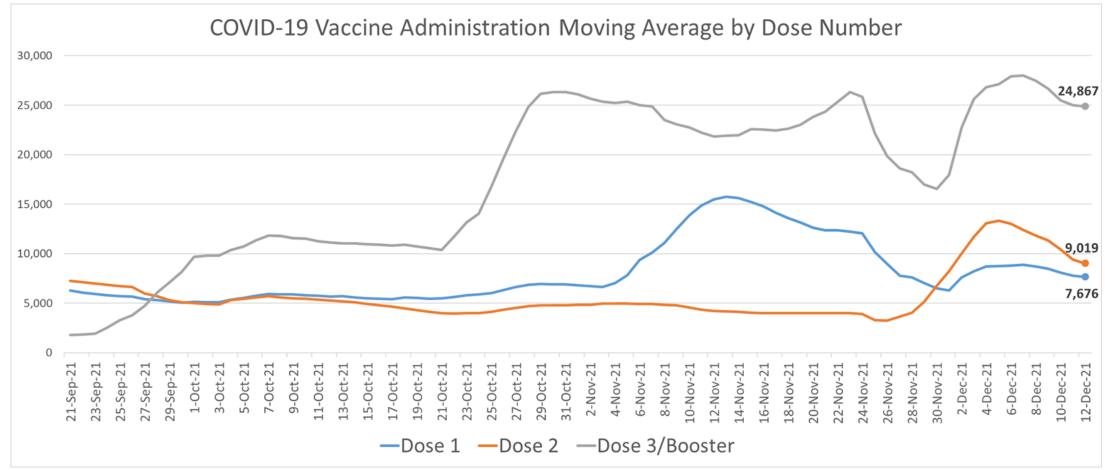


# **Virginia Vaccination by Age**

- **√ 87.2%** (+1.7%) of the Adult (18+) Population Vaccinated with at Least One Dose
- √ 70.8% (+2.6%) of the Eligible (5+) Population Fully Vaccinated
- √ 95.5% (+1.0%) of Virginians 65+ and 47.3% (+6.8%) of 5 to 17 year olds have received at Least One Dose
- √ 66.6% (+2.6%) of the Total Population has been Fully Vaccinated
- Green percent represents percent increase from two weeks prior

# First Dose, Second Dose, and Third Dose / Booster Administrations Are Plateauing

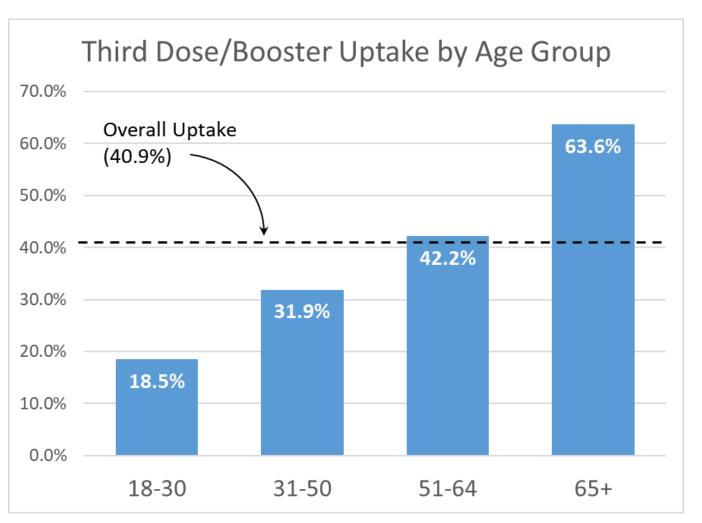
- First Dose administrations are plateauing after seeing a slight increasing following Thanksgiving
- Second Dose Administrations are plateauing after seeing a sharp increase from 5 to 11 year olds
- · Third Dose/Booster administrations are plateauing after seeing a sharp increase following Thanksgiving break

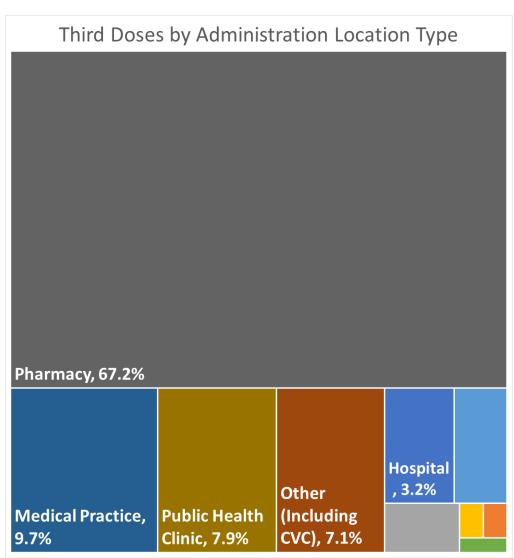


Source: COVID-19 Vaccine Summary - Coronavirus (virginia.gov)

Third Dose/Booster Metrics show higher uptakes for older Age Groups, with over Two-thirds of

**Boosters being administered at Pharmacies** 



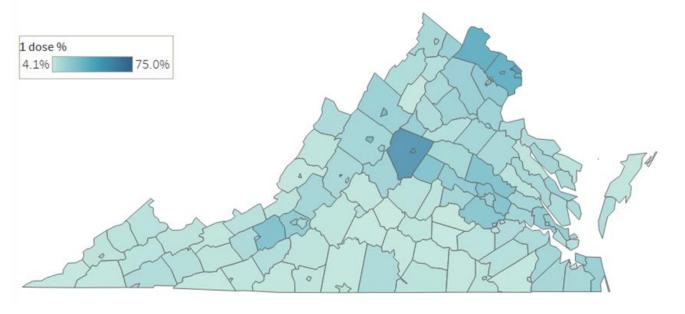


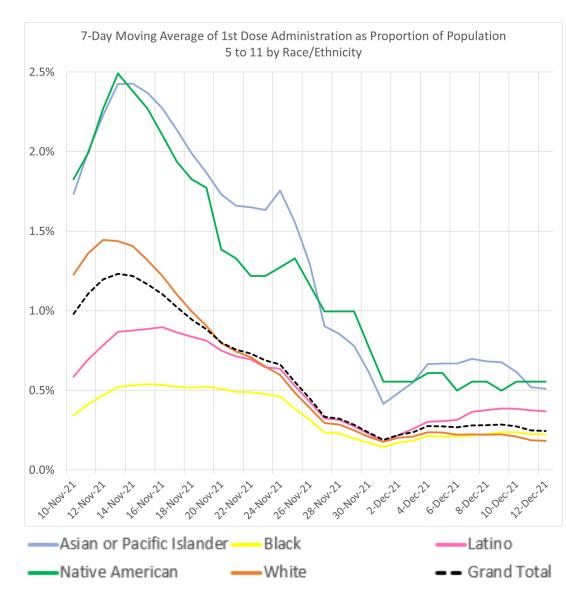
Green percent represents percent increase from two weeks prior Federal doses not included in this number

Source: COVID-19 Vaccine Summary - Coronavirus (virginia.gov)

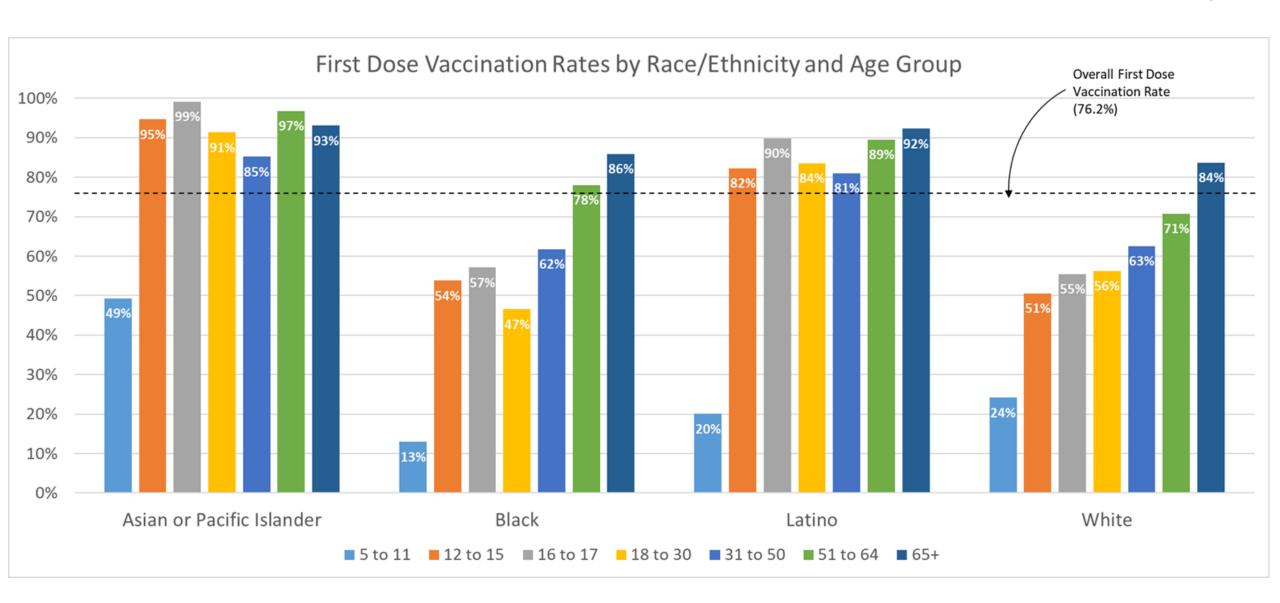
# **Large Demographic Disparities in 5-11 First Dose Administration**

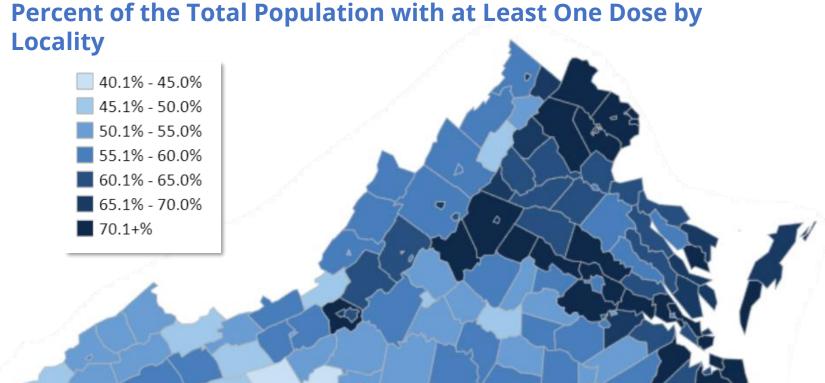
- After multiple weeks of decline, first dose administrations are now plateauing
- While White children are currently seeing the most first dose administrations in quantity, Asian and Native American children have the highest vaccinations as a proportion of population
- Conversely: White, Black and Latino children have the lowest vaccination rates as a proportion of population so far
- There is a very large geographic disparity in vaccination rates





Source: COVID-19 Vaccine Summary – Coronavirus (virginia.gov)



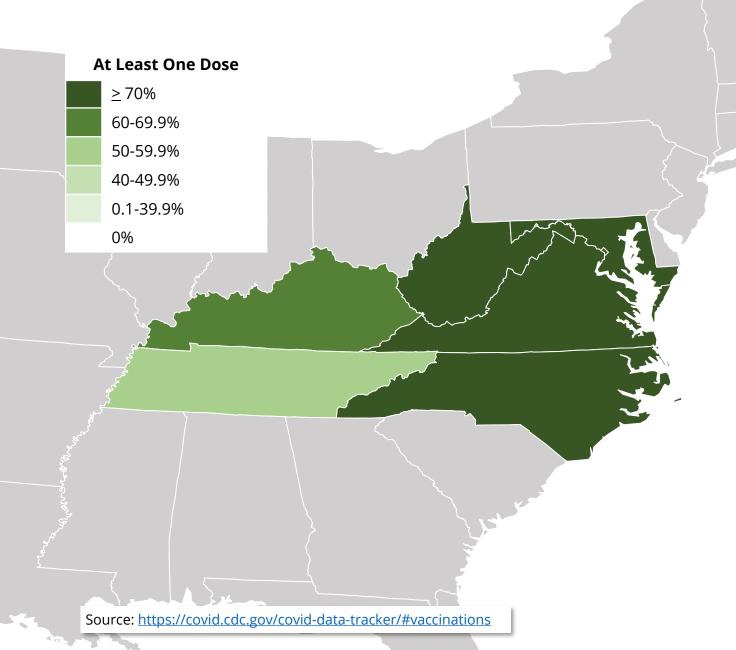


					100		2.00	37
2013 SRHP Isserman Classification	5 to 11	12 to 17	16 to 17	18 to 30	31 to 50	51 to 64	65+	<b>Grand Total</b>
Mixed Urban	30%	70%	75%	71%	72%	83%	86%	64%
Urban	27%	72%	78%	63%	75%	84%	95%	73%
Mixed Rural	20%	50%	57%	55%	62%	73%	82%	60%
Rural	12%	41%	48%	50%	56%	69%	92%	72%
Grand Total	25%	64%	70%	62%	70%	79%	89%	69%

# First Dose Vaccination Rate by Region for Total Population

Pagion Nama	1st Dose		
Region Name	Vaccination		
Central	66.2%		
Eastern	69.9%		
Northern	79.2%		
Northwest	63.7%		
Southwest	55.5%		

- 10 out of 133 Localities have a first dose vaccination rate below 50%
- 43 out of 133 Localities have a first dose vaccination rate above 65%
- There is a disparity across Urban and Rural areas by Age Groups, with Rural Adolescents the Lowest Vaccinated group



	At Least One Dose*	Fully Vaccinated*
Nationwide	72.2% (+2.8%)	61.0% (+2.7%)
D.C.	85.0% (+4.2%)	66.3% (+2.8%)
Kentucky	61.5% (+2.0%)	53.4% (+2.5%)
Maryland	78.6% (+2.2%)	69.4% (+2.7%)
North Carolina	73.2% (+4.1%)	55.6% (+2.6%)
Tennessee	57.8% (+1.8%)	50.5% (+2.0%)
Virginia**	77.3% (+2.2%)	66.9% (+3.1%)
West Virginia	89.4% (+65.9%)	71.4% (+72.0%)
West Virginia	89.4% (+65.9%)	71.4% (+72.0%)

<sup>\*</sup>Total population, includes out-of-state vaccinations

<sup>\*\*</sup>Differs from previous slide because all vaccination sources (e.g., federal) are included \*\*\* Green percent represents percent increase from two weeks prior